$$A - \left[ \begin{array}{c} N - \left\langle \begin{array}{c} Ar^1 \\ N \end{array} \right\rangle_{m} \\ Ar^2 \end{array} \right]_{m}$$

wherein A is a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings; Ar¹ and Ar² are each independently aryl or aliphatic; and m represents the number of repeating segments; an electroluminescent device wherein the A aromatic group is selected from the group consisting of



DI

wherein R¹ to R⁵ are each independently a substituent selected from the group consisting of hydrogen, aliphatic, a halogen atom, and a cyano group; L is a divalent group selected from the group consisting of —C(R'R")—, alkylene, an

oxygen atom, a sulfur atom; and —Si(R'R")— wherein R' and R" are selected from the group consisting of hydrogen, alkyl, alkoxy, and aryl; G is a divalent linkage and each i, j, and k represent the number of repeating groups; an electroluminescent device wherein A contains a biphenyl, a naphthyl or a terphenyl; Ar¹ and Ar² are each independently an aryl group selected from the group consisting of a phenyl, a biphenylyl, a naphthyl, and a stilbenyl; and wherein the aryl group optionally further contains a substituent selected from the group consisting of hydrogen, an alkyl group with from 1 to about 6 carbon atoms, an alkoxy group with from 1 to about 6 carbon atoms, an alkoxy group with from 1 to about 6 carbon atoms, a halogen, and a cyano group; an electroluminescent device wherein the triazine compounds are represented by the Formula (II), (III), (IV), or (V)



wherein Ar¹, Ar², Ar³, and Ar⁴ are each independently an aryl; R¹ and R² are substituents selected from the group consisting of hydrogen, an alkyl, an aryl, an alkoxy, a halogen atom, and a cyano; R³ and R⁴ are each a divalent group L selected from the group consisting of —C(R'R")—, alkylene, an oxygen atom, a sulfur atom, and —Si(R'R")—, wherein R' and R" are selected, for example, from the group consisting of hydrogen, alkyl, alkoxy, and aryl; an electroluminescent-device-wherein-Ar¹, Ar², Ar³, and Ar⁴ are aryl-with-about-6 to about 36 carbon atoms, and more specifically, are selected from the group consisting of a phenyl, a biphenylyl, a naphthyl, and a stilbenyl; and wherein the aryl group contains a substituent selected from the group consisting of

NO

hydrogen, an alkyl group with from 1 to about 12 carbon atoms, an alkoxy group with from 1 to about 6 carbon atoms, a halogen atom, and a cyano group; an electroluminescent device wherein the aryl is selected from the group consisting of a phenyl, a tolyl, a methoxyphenyl, a butylphenyl, a naphthyl, and a biphenylyl, and wherein R1 and R2 are hydrogen or methyl; an electroluminescent device wherein L is —C(R'R")—, wherein R' and R" is a hydrogen atom, an alkyl group containing from 1 to about 10 carbon atoms, or an alkoxyl group containing from 1 to about 10 carbon atoms; an electroluminescent device wherein the triazine is selected from the group consisting of 2,4,6-tris(4-biphenylyl)-1,3,5-triazine, 2,4,6-tris[4-(4'-2,4,6-tris[4-(4'-tert-butylbiphenylyl)-1,3,5methylbiphenylyl)]-1,3,5-triazine, triazine. 2,4,6-tris[4-(4'-methoxybiphenylyl)]-1,3,5-triazine, 4.4'-bis-[2-(4.6diphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-p-tolyl-1,3,5triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-m-tolyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-p-methoxyphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-m-methoxyphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4.4'-bis-[2-(4-βnaphthyl-6-phenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 2,7-bis-[2-(4,6-di-phenyl-1,3,5-triazinyl)]fluorene, 2,7-bis-[2-(4,6-di-phenyl-1,3,5-triazinyl)]-9,9dimethylfluorene, 4,4'-bis-[2-(4,6-di-phenyl-1,3,5-triazinyl)]-stilbene, and 4,4'bis-[2-(4-phenyl-6-m-tolyl-1,3,5-triazinyl)]-stilbene; an electroluminescent device wherein the triazine is selected from the group consisting of 2,4,6-4,4'-bis-[2-(4,6-diphenyl-1,3,5-triazinyl)]-1,1'tris(4-biphenylyl)-1,3,5-triazine, 4,4'-bis-[2-(4,6-di-p-tolyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-m-tolyl-1,3,5-triazinyl)]-1,1'-biphenyl,\_\_\_\_\_ <u>4,4'-bis-[2-(4,</u>6-di-pmethoxyphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-p-tertbutylphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, and 4,4'-bis-[2-(4,6-di-phenyl-1,3,5triazinyl)]-stilbene; an electroluminescent device comprised of, in sequence, an anode, an optional buffer layer, a hole transport layer, an electron transport

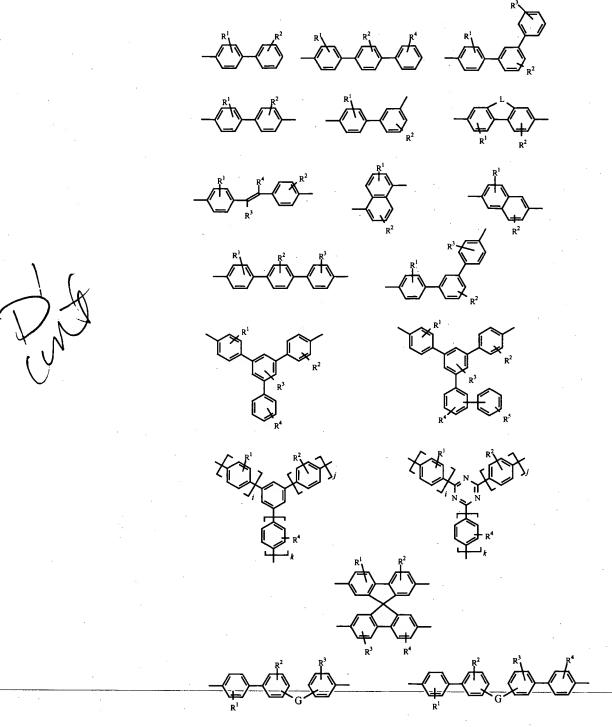
layer, and in contact therewith a cathode, wherein the electron transport layer contains an electron transport component comprised of a triazine compound or compounds encompassed by the formula

$$A - \left[ \begin{array}{c} N - \left( \begin{array}{c} Ar^1 \\ N \end{array} \right)_{m} \right]_{m}$$

(I)

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wherein A is an aromatic group which contains at least two conjugate-linked or two fused aromatic rings; Ar¹ and Ar² are each independently aryl or aliphatic; and m represents the number of repeating segments; an electroluminescent device wherein the A group is selected from the group consisting of



wherein R¹ to R⁵ are each independently a substituent selected from the group consisting of hydrogen, aliphatic, a halogen atom, and a cyano group; L is a divalent group selected from the group consisting of —C(R'R")—, alkylene, an

oxygen atom, a sulfur atom; and —Si(R'R")— wherein R' and R" are selected from the group consisting of hydrogen, alkyl, alkoxy, and aryl; G is a divalent linkage and each i, j, and k represent the number of repeating groups; an electroluminescent device which contains a biphenyl, a naphthyl or a terphenyl; Ar¹ and Ar² are each independently an aryl group selected from the group consisting of a phenyl, a biphenylyl, a naphthyl, and a stilbenyl; wherein the aryl group optionally further contains a substituent selected from the group consisting of hydrogen, an alkyl group, an alkoxy group, a halogen, and a cyano group; an electroluminescent device wherein there is selected a triazine compound represented by the Formula (II), (III), (IV), or (V)



Ar<sup>1</sup>

Ar<sup>1</sup>

$$R^1$$
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^4$ 
 $R^2$ 
 $R^3$ 
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 $R^2$ 
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 $R^4$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^4$ 
 $R^2$ 
 $R^4$ 
 $R^4$ 

$$\begin{array}{c|c}
\hline
 & Ar^1 & R^1 & Ar^3 \\
\hline
 & N & N & N & N \\
\hline
 & Ar^2 & N & N & N \\
\hline
 & Ar^4 & (V) & Ar^4
\end{array}$$

wherein Ar<sup>1</sup>, Ar<sup>2</sup>, Ar<sup>3</sup>, and Ar<sup>4</sup> are each independently alkyl or preferably aryl; R<sup>1</sup> and R<sup>2</sup> are substituents selected from the group consisting of hydrogen, an alkyl, an aryl, an alkoxy, a halogen atom, and cyano; L is a divalent group selected from the group consisting of —C(R'R")—, alkylene, an oxygen atom, a sulfur atom, and —Si(R'R")—, wherein R' and R" are each selected from the group consisting of hydrogen, alkyl, alkoxy, and aryl; an electroluminescent device wherein Ar1, Ar2, Ar3, and Ar4 are selected from the group consisting of phenyl, biphenylyl, naphthyl, and stilbenyl; wherein the aryl group further contains a substituent selected from the group consisting of hydrogen, an alkyl group with from 1 to about 10 carbon atoms, an alkoxy group with from 1 to about 10 carbon atoms, a halogen atom, and a cyano group; an electroluminescent device wherein the aryl is selected from the group consisting of a phenyl, a tolyl, an methoxyphenyl, a butylphenyl, a naphthyl, and a biphenylyl; wherein R1 and R2 are hydrogen or methyl; an electroluminescent device wherein L is -C(R'R")-, wherein R' and R" is a hydrogen atom, an alkyl group containing from 1 to about 6 carbon atoms, or an alkoxyl group containing from 1 to about 6 carbon atoms; an electroluminescent device wherein the hole transport layer or the electron transport layer is a light emitting layer; an electroluminescent device wherein the buffer layer is comprised of a phthalocyanine or derivatives thereof, a tertiary aromatic amine. а polyaniline, or а polythiophene; electroluminescent device wherein the buffer layer is comprised of the tertiary aromatic amine N,N',N,N'-tetraarylbenzidine, optionally doped with an aromatic polycyclic hydrocarbon stabilizer of rubrene or a 9,10diphenylanthracene, wherein the stabilizer is present in an amount of from about 0.5 to about 10 weight percent, based on the weight of the tertiary aromatic amine, and the stabilizer; an electroluminescent device further containing a light emitting layer situated between the hole transport layer and electroluminescent device wherein the fluorescent dye is selected from the group consisting of coumarins, quinacridones, and aromatic hydrocarbon fluorescent dyes; an electroluminescent device wherein the fluorescent dye is present in an amount of from about 10<sup>-3</sup> to about 10 mole percent based on the moles of the light emitting layer material; an electroluminescent component wherein there is selected a triazine compound selected from the group consisting of 2,4,6-tris(4-biphenylyI)-1,3,5-triazine, 2,4,6-tris[4-(4'methylbiphenylyl)]-1,3,5-triazine, 2,4,6-tris[4-(4'-tert-butylbiphenylyl)-1,3,5-2,4,6-tris[4-(4'-methoxybiphenylyl)]-1,3,5-triazine, triazine. 4,4'-bis-[2-(4,6-4,4'-bis-[2-(4,6-di-p-tolyl-1,3,5diphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-m-tolyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-p-methoxyphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4.4'-bis-[2-(4,6-di-m-methoxyphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4-βnaphthyl-6-phenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 2,7-bis-[2-(4,6-di-phenyl-1,3,5-triazinyl)]fluorene, 2,7-bis-[2-(4,6-di-phenyl-1,3,5-triazinyl)]-9,9-dimethyl fluorene, 4,4'-bis-[2-(4,6-di-phenyl-1,3,5-triazinyl)]-stilbene, and 4,4'-bis-[2-(4phenyl-6-m-tolyl-1,3,5-triazinyl)]-stilbene; an electroluminescent compound

the electron transport layer; an electroluminescent device wherein the light

emitting layer is comprised of a metal chelate compound of an 8-

hydroxyquinoline, or a stilbene derivative; an electroluminescent device

wherein the light emitting layer further contains a fluorescent dye; an

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wherein there is selected a triazine compound selected from the group

consisting of 2,4,6-tris(4-biphenylyl)-1,3,5-triazine, 4,4'-bis-[2-(4,6-diphenyl-

1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-p-tolyl-1,3,5-triazinyl)]-1,1'-

biphenyl, 4,4'-bis-[2-(4,6-di-m-tolyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-

(4,6-di-p-methoxyphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, 4,4'-bis-[2-(4,6-di-p-tert-

butylphenyl-1,3,5-triazinyl)]-1,1'-biphenyl, and 4,4'-bis-[2-(4,6-di-phenyl-1,3,5-

triazinyl)]-stilbene; an electroluminescent device wherein the anode is

comprised of an indium tin oxide, and the cathode is comprised of a low work function metal; an electroluminescent device wherein the low work function metal is lithium, magnesium, aluminum, or each of the alloys thereof; an organic electroluminescent device comprising in the following sequence an anode comprised of indium tin oxide in a thickness of from about 1 to about 500 nanometers, including 90 nanometers, an optional buffer layer comprised of a phthalocyanine or a stabilized tertiary aromatic amine and which buffer layer is of a thickness of from about 5 to about 300 nanometers, including 90 nanometers, a hole transport layer comprised of a tertiary aromatic amine and which layer is of a thickness of about 1 to about 200 nanometers, including 90 nanometers, a triazine electron transport layer of a thickness of from about 5 to about 300 nanometers, including 90 nanometers, and a cathode comprised of a low work function metal and which cathode is of a thickness of from about 10 to about 800 nanometers and wherein the triazine is of the formula

 $A = \begin{bmatrix} N - Ar^1 \\ N - N \end{bmatrix}_m$ 

wherein A is aromatic which contains at least two conjugate-linked or two fused aromatic rings; Ar¹ and Ar² are each independently aryl or aliphatic; and m represents the number of repeating segments; an organic electroluminescent device wherein the anode is of a thickness of from about 30 to about 100 nanometers, the buffer layer is present and is comprised of a phthalocyanine or a stabilized tertiary aromatic amine and which layer is of a thickness of from about 10 to about 200 nanometers, a light emitting layer in contact with the hole transport layer and comprised of an 8-hydroxyquinoline metal chelate or a stilbene derivative and which layer is of a thickness of from



about 1 to about 500 nanometers; an organic electroluminescent device comprised of an anode, an organic luminescent medium, and a cathode, wherein the organic luminescent medium contains a triazine layer in contact with the cathode, which layer is comprised of the triazine compounds of Formula (I), and wherein the triazine functions as an electron transport, an electron injector, or simultaneously as an electron transport and an electron injector

$$A = \begin{bmatrix} N - Ar^1 \\ N - N \end{bmatrix}_{m}$$
(1)

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wherein A is a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or at least two fused aromatic rings; Ar¹ and Ar² are each independently aryl or aliphatic; and m represents the number of repeating segments; an organic electroluminescent device wherein the cathode is comprised of lithium, magnesium, aluminum, or their alloys; an organic electroluminescent device wherein the cathode is comprised of aluminum; an organic electroluminescent device wherein there is selected a triazine represented by the Formula (II), (III), (IV), or (V)

Ar<sup>1</sup>

N

N

(III)

$$R^2$$
 $Ar^3$ 
 $Ar^4$ 

(III)

 $R^1$ 
 $R^2$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^2$ 
 $R^3$ 

$$Ar^{1} \longrightarrow R^{1} \longrightarrow CH = CH \longrightarrow R^{2} \longrightarrow N \longrightarrow N$$

$$Ar^{2} \longrightarrow N \longrightarrow N$$

$$Ar^{2} \longrightarrow N \longrightarrow N$$

$$Ar^{4} \longrightarrow N \longrightarrow N$$

$$Ar^{4} \longrightarrow N \longrightarrow N$$

(IV)

wherein the substituents are as illustrated herein; an electroluminescent device comprised of an anode, a cathode, and a triazine compound of the formula

$$A = \begin{bmatrix} N - Ar^1 \\ N - N \end{bmatrix}_m$$

(I)

wherein A is a monovalent aromatic group or a multivalent aromatic group which contains from about 2 to about 15 two conjugate-linked or from about 2 to about 15 fused aromatic rings; Ar<sup>1</sup> and Ar<sup>2</sup> are each independently aryl or

aliphatic; and m represents the number of repeating segments and is a number of from 1 to about 4, and wherein the triazine functions as an electron transport, an electron injector, or simultaneously as an electron transport and an electron injector; an organic electroluminescent device wherein the anode is of a thickness of from about 30 to about 100 nanometers, the buffer layer is of a thickness of from about 10 to about 100 nanometers, the hole transport is of a thickness of from about 5 to about 100 nanometers, the triazine electron transport layer is of a thickness of from about 10 to about 100 nanometers, and the cathode is of a thickness of from about 50 to about 500 nanometers, and wherein the low is from about 2 to about 4 electron volts, and wherein Ar<sup>1</sup> and Ar<sup>2</sup> are each independently aryl; an organic electroluminescent device wherein the anode is of a thickness of from about 30 to about 100 nanometers, the buffer layer is of a thickness of from about 10 to about 100 nanometers, the hole transport layer is comprised of a tertiary aromatic amine in a thickness of about 5 to about 100 nanometers, thereover a light emitting layer comprised of an 8-hydroxyquinoline metal chelate or a stilbene derivative of a thickness of from about 10 to about 100 nanometers, the triazine electron transport layer is of a thickness of about 10 to about 100 nanometers, and the cathode is of a thickness of from about 50 to about 500 nanometers; an electroluminescent device wherein the triazines R¹ to R⁵ are each alkyl, alkoxy, or mixtures thereof; alkyl for the R' and R" contains from 1 to about 25 carbon atoms; and each of the i, j and k represent a number of from 1 to about 3; an electroluminescent device wherein at least one is from 1 to-about-10; an-electroluminescent device wherein the at least one is from 1 to about 3; an electroluminescent device wherein the at least two is from 2 to about 7, and electron transport electron injection, or mixtures thereof, components comprised of the triazine compounds illustrated by the formula

$$A = \begin{bmatrix} N - Ar^1 \\ N - N \end{bmatrix}_m$$

wherein Ar¹ and Ar² are independently aromatic, such as an aryl group, and which aryl can, for example, be selected from the group consisting of a phenyl, a stilbenyl, a biphenylyl, a naphthyl, a pyridyl, and a quinolyl and the like, and wherein the aryl group may further contain a substituent selected from the group consisting of hydrogen, an alkyl group with, for example, from 1 to about 10 carbon atoms, an alkoxy group with, for example, from 1 to about 10 carbon atoms, a dialkylamino group with preferably from about 1 to about 3 carbon atoms, a halogen, a cyano group and the like; m is a number of from 1 to about 4; and A is a monovalent or a multivalent aromatic group which contains at least two conjugate-linked or two fused aromatic rings, such as from about 2 to about 10.

